



Quantity	Trial 1	Trial 2
Mass of each clip (g)		
$m_c$ 1 ____ 2 ____ 3 ____ 4 ____		
$F_1 - m_c \times 9.8$ ____ (N)		
$F_2 - m_c \times 9.8$ ____ (N)		
$M_1$ ____ + $m_c$ ____ (g)		
$M_2$ ____ + $m_c$ ____ (g)		
Mass of ruler (g)		
$L_2$ (cm)		
$L_3$ (cm)		
$L_4$ (cm)		
$L_5$ (cm)		
$\theta$ (degrees)	90	
$\phi$ (degrees)	90	

Analysis: p43

Sum all forces (down negative)

Sum all torques (counter-clockwise negative)

M1 and m2 add mass of the clip

$F_1 \sin \theta$  and  $F_2 \sin \phi$  subtract the weight of the clip

%error = sum/average magnitude x100%

(magnitude: all values are positive)

Hand in data table, the calculation of forces and torques and error for each trial

Calculate sum of torques if you change reference point to the midpoint

Practice problems 1-4

Due Feb 17th same as quiz this will be on the quiz

Not a formal report